

Dynamic stability: Unfolding dynamics of vicious cycles in a design firm

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Abstract

Paradoxes generate tensions and contradictions in organizations. In this paper, we contribute to the paradox literature by developing a complex systems approach to how organizational members experience tensions generated by the strategic intent paradox. Specifically, we focus on the unfolding dynamics of vicious cycles experienced by organizations dealing with paradox. Drawing on a case study of a design firm, we demonstrate how a vicious cycle forms through feedback loops and develops dynamic stability over time. Based on our findings, we develop a micro-level understanding of vicious cycles which incorporates defence mechanisms at staff and senior management levels. Our main contribution is a theoretical model of unfolding dynamics of vicious cycle. Our model shows the importance of 1) feedback loops that underpin a vicious cycle and; 2) importance of circular causality, reinforcing cycles, and micro-mechanisms in theorizing vicious cycles.

Keywords

Paradox, vicious cycles, dynamics, case study, ethnography, design firms

1. Introduction

The notion of paradox has become an important meta-theory for understanding interdependent and persistent contradictions, tensions, and dynamics in organizations (Fairhurst, et al., 2016; Lewis & Smith, 2014; Schad, Lewis, Raisch, & Smith, 2016). A paradox lens recognises that contradictions and tensions, unlike problems or dilemmas, cannot be fully resolved (Jay, 2013; Lewis, 2000; Smith, 2014; Smith & Lewis, 2011). Although it is useful to recognize paradoxes and to surface the underlying nested tensions, we know little about the unfolding dynamics of vicious cycles when paradoxes are not successfully managed. The dominant focus in the literature has been on identifying and managing paradoxes, rather than the experiences of individuals and groups struggling to live with paradoxes.

In their review of the literature, Schad et al. (2016) showed that majority of paradox research has focused on the types, collective, and outcomes of paradoxes when these are successfully managed by organizational actors. What is missing are studies that focus on individuals and their social interactions which unfold over time. It is important to address this gap because how individuals engage and respond to paradoxes can help understand the micro-mechanisms that underpin paradoxes. For example, previous studies have shown how individuals can respond creatively to and manage paradoxes (Gaim, 2018; Janssens & Steyaert, 1999; Miron-Spektor, Erez, & Naveh, 2011; Tse, 2013). However, these studies focus on managing paradoxes, rather than the individual experiences of not managing paradoxes successfully.

Schad et al. (2016) also highlight that one of the under-researched aspects of paradoxes is the dynamics of vicious cycles. The literature identifies vicious cycles as a negative outcome of paradoxes, and is seen in contrast to virtuous cycles rather than an unfolding dynamic. In this paper we address this gap by focusing on how tensions are experienced by organizational

members over time in an organizational setting struggling to cope with these tensions. Understanding vicious cycles as a separate phenomenon, rather than in contrast to virtuous cycles is important because they create significant consequences in organizations. For example, vicious cycles generated by group think in boards can exacerbate “faulty attributions, threat rigidity, and escalating commitment to a failing course of action, eventually resulting in failure” (Sundaramurthy & Lewis, 2003, p. 402). Hence, it is important to theoretically understand the dynamics of vicious cycles.

A key challenge in understanding the unfolding dynamics of vicious cycles is the issue of feedback loops and circular causality. Both these terms have their origins in systems thinking and cybernetics (Richardson, 1991; Von Foerster, 2007). By feedback loops we mean that there are ongoing and interrelated actions that unfold over time; one action influences the other which in turn loops back to influence the first action. We use feedback loops as a generic term to characterize interconnectedness within a system. By circular causality we mean that these feedback loops counter-balance the unfolding dynamics. Theoretically, Smith and Lewis (2011) argued that the unfolding dynamics of paradoxes can lead to reinforcing cycles that can be positive, in the form of virtuous cycles, and negative, in the form of vicious cycles. In this paper we build on Schad et al. (2016, p. 40) who “propose complexity and adaptive systems as a meta-theoretical principle to explore the dynamics of paradox from a process perspective”. We are not aware of any empirical studies that look at how these reinforcing cycles unfold and identify the feedback loops and circular causality that underpin the unfolding dynamics of a vicious cycle.

We focus on the dynamics of a vicious cycle created by the strategic intent paradox (the need to generate stable revenue/profit vs. the need to achieve breakthroughs) in a design firm to answer two research questions: 1) how do the dynamics of a vicious cycle unfold? and 2) how do feedback loops interact in the dynamics of a vicious cycle? We make two main

contributions to the existing literature on paradox. Firstly, we provide an empirically grounded study of how vicious cycles unfold through circular causality, reinforcing cycles, and micro-mechanisms. Building on prior research that has identified vicious cycle as a negative outcome of paradox, we develop a model that focuses on the process of unfolding. This process insight is important for understanding vicious cycles as a complex adaptive system, regulated through feedback loops. Our findings adds to the literature on paradox dynamics by providing a rich description of dynamic stability of vicious cycles. This is important because it helps scholars and managers/leaders to understand the challenge of managing paradoxes from the experience of front-line employees.

Secondly, our findings challenge existing understanding of vicious cycles in the literature. Whilst the extant literature on paradoxes has identified the existence of vicious cycles, scholars see vicious cycles and virtuous cycles as negative and positive respectively. For example, Smith and Lewis (2011, p. 391) argue that in vicious cycles “individual and organizational forces for consistency fuel a reinforcing cycle by becoming increasingly forced on a single choice”. Sundaramurthy and Lewis (2003) also reach the same conclusion, arguing that vicious cycles skew towards one pole of the paradox. The main understanding in literature is currently constrained by focusing on shifting from a negative vicious cycle to a positive virtuous cycle (Pradies, Tunarosa, Lewis, & Courtois, 2020). In contrast, we theorize vicious cycles as dynamic stabilizing loops that focus on both poles of the paradox. Our findings show that managerial actions can contribute to the continued existence of vicious cycles. Importantly, we demonstrate how defence mechanisms in a vicious cycle can form recurrent reinforcing cycles leading to circular causality.

We organize the paper as follows. Firstly, we provide a brief overview of the paradox lens and its distinctive contribution. We focus on the literature on vicious cycles in organizations and review the key reinforcing cycles and feedback loops. Secondly, we

elaborate on the methodological approach followed in this study, detailing the research context, data collection, and data analysis process. Thirdly, we present our findings and develop a model of unfolding dynamics of a vicious cycle. Finally, we discuss our findings in relation to the literature reviewed and suggest future directions.

2. The strategic intent paradox and vicious cycles

The tension between the need to generate stable revenue/profit and achieve breakthroughs which enhance creative reputation is the source of the ‘strategic intent’ paradox (Andriopoulos & Lewis, 2009). The ambitions articulated by senior management through strategic intent can have paradoxical effects (Gary, Yang, Yetton, & Sterman, 2017; Sitkin, See, Miller, Lawless, & Carton, 2011), and can lead to tensions and contradictions within organizations, as firms attempt to focus on existing clients and revenue streams, allocate scarce resources efficiently, and at the same time, aim to take risks with radical projects that can build reputation and leadership. Recognizing strategic intent as paradoxical provides a new lens to understand and address this tension. The focus shifts from resolving the tensions to balancing the two interrelated poles of profits and breakthroughs.

Paradoxical tensions are often latent in organizations. Senior management can “enable latent paradoxical tensions to become salient [to staff] through their leadership practices” (Knight & Paroutis, 2017, p. 423). Once paradoxical tensions are rendered salient, they spur responses which can fuel negative or positive reinforcing cycles, i.e. vicious or virtuous cycles. Scholars argue that virtuous cycles are a result of organizational actors’ acceptance and resolution strategies, therefore positive response to paradoxical tensions. In contrast, vicious cycles, the focus of this paper, are a result of “cognitive and behavioural forces for consistency, emotional anxiety and defensiveness, and organizational forces for inertia” (Smith & Lewis, 2011, p. 391). Organizational actors, in their efforts to resolve these paradoxical tensions, can

become trapped within reinforcing cycles that preserve and aggravate the tension (Lewis, 2000). In such cycles, “by trying to avoid undesired outcomes, [organizational actors] actually create these outcomes. And by continuing their activities, they continue to reproduce those undesired outcomes” (Masuch, 1985, p. 25). “[T]hese self-reinforcing cycles...tie directly to paradoxes since [they] can develop into unusual routines or crazy systems that generate confusion and blind alleys, often beginning where they end” (Putnam, Fairhurst, & Banghart, 2016, p. 83).

Scholars suggest that vicious cycles exist for two main reasons. Firstly, vicious cycles are created by organizational actors because they do not possess adequate understanding of the situation as paradoxical. Cognitive dispositions can bias people against recognising the vicious cycles and organizational routines can focus on one pole of the paradox (Masuch, 1985; Smith & Lewis, 2011). For example, Sundaramurthy and Lewis (2003) argue that in dealing with the governance paradox of control–collaboration, organizations can create vicious cycles by focusing on one pole of the paradox. Second, organizational actors fail to find the root of the problem due to the complexity of situation, that is the “number of possible causal links within an action structure, [which also] enhances the birth rate as well as the life expectancy of vicious circles” (Masuch, 1985, p. 25). For example, Stoppelenburg and Vermaak identified a vicious cycle caused by intervention paradoxes, where “the desire to reduce uncertainty and use standardized solutions is highest precisely when facing wicked problems. These, however, are also the most dysfunctional responses. Not only do they not work, but they create additional resistance against future efforts to deal with wicked problems” (Stoppelenburg & Vermaak, 2009, p. 41).

In contrast, if organizational actors recognise the paradox and develop paradoxical thinking, they can re-consider their original understanding of the situation; “with awareness of tensions triggering a management strategy of acceptance rather than defensiveness” (Smith &

Lewis, 2011, p. 391). “Managing paradox...does not imply avoiding, fighting or even resolving tensions, but tapping their energy” (Andriopoulos & Lewis, 2010, p. 106). Paradoxes can be managed by accepting their contradictions and learning to cope with them (Lüscher & Lewis, 2008), by adopting paradoxical thinking integrating and differentiating between alternatives or by combining these two approaches.

Recently, scholars have focused on paradoxical thinking to argue that individuals with paradoxical thinking or mindset accept tensions which enables them to “fully capture ambiguous and complex configurations of reality, and...learn to live with tensions and pursue, scrutinize, and confront conflict to stimulate new understanding” (Miron-Spektor, Ingram, Keller, Smith, & Lewis, 2018, p. 30). Tensions generated by paradoxes can be managed through paradoxical thinking through “a dedicated and sustained effort not only to embed paradoxical thinking in the behaviours and work routines of the innovation project team, but also to extend this thinking to larger numbers of employees in the organization” (Calabretta, Gemser, & Wijnberg, 2017, p. 388).

However, the first reactions to paradoxical tensions from organizational actors are often defensive, holding to past understandings to avoid reorganizing their cognitive and social shortcomings (Harris, 1996). Lewis (2000) provides a catalogue of defensive reactions: (1) splitting, which involves further polarizing contradictions such as “forming subgroups, or artificial ‘we/they’ distinctions that mask similarities” (Lewis, 2000, p. 763), (2) projection, which entails transferring conflicting attributes or feelings to others (a scapegoat), (3) regression, which signifies following actions which have offered some level of security in the past (Smith & Berg, 1987), (4) reaction formation, which involves “excessively manifesting the feeling opposite to the threatening one” (Vince & Broussine, 1996, p. 5), (5) repression, where organizational actors block unpleasant experiences from memory, (6) denial which includes organizational actors’ refusal to accept an unpleasant reality (Smith & Berg, 1987;

Vince & Broussine, 1996), and (7) ambivalence, which “signifies the compromise of conflicting emotions within ‘lukewarm’ reactions that lose the vitality of extremes” (Lewis, 2000, p. 763). For example, Derksen et al’s (2019) study determined that teams which were unsuccessful in coping with an organizational paradox denied its existence and/or chose to focus on one pole of the paradox. “Organizational members often rely on defensive mechanisms when they feel trapped in self-reinforcing cycles, especially when contradictions cross multiple organizational levels” (Putnam et al., 2016, p. 123).

While individuals may react defensively, problems arise when “individual defensiveness can become habitual and overused, creating defensive group patterns that institutionalize through competitiveness, denial, and avoidance as underlying organizational processes” (Vince & Broussine, 1996, p. 5). These defensive behaviours can be deceiving because they initially produce effects that reduce the tension, for example by strengthening commitment to habitual practices, but ultimately lead to opposite unintended consequences that exacerbate the underlying tensions. In other words, defence mechanisms are the usual reaction to cope with paradoxical tensions, but can fuel the vicious cycles even further. In their attempt to resolve paradoxical tensions organizational actors become trapped within reinforcing cycles which preserve and aggravate the tension (Lewis, 2000).

Our data as explained in our research findings section, points us towards three of these defence mechanisms: regression, ambivalence, and splitting. Diamond and Allcorn defined regression as “a reaction against environmental circumstances that are perceived as threatening to the self” (Diamond & Allcorn, 1987, p. 527). Organizational decline, leadership transitions, and ambiguity of authority and leadership can bring about change and uncertainty and trigger regression which “protects and preserves one’s self from annihilation by withdrawal into a safe and secure inner space” (Diamond & Allcorn, 1987, p. 527).

Ashforth et al. define ambivalence as “simultaneously positive and negative orientations toward an object” (Ashforth, Rogers, Pratt, & Pradies, 2014, p. 1454). By orientation, they refer to a person’s “alignment or position with regard to the object...Thus ambivalence is often described as having ‘mixed feelings’, being ‘torn between conflicting impulses’ and being ‘pulled in different directions’” (Ashforth, et al., 2014, p. 1454). Roots of ambivalence include the complexity and dynamism in the environment and the organization itself in the form of conflicting demands leading to oppositions. Organizational actors’ responses to ambivalence can include compromise where there is a moderate focus on both orientations.

Splitting is forming subgroups and having a ‘them and us’ attitude which can mask similarities and affect group cohesiveness (Lewis, 2000, p. 763). Organizational actors often exaggerate cultural and occupational uniqueness in order to secure their identity, albeit temporarily; by doing so they affect mutual understanding within organizations (Martin, 1992). Splitting often leads to lower performance compared to less powerful groups (Leonard-Barton, 1992).

To summarize, in the literature, there is a gap in our understanding of individual responses at different levels to vicious cycles. Scholars have identified that paradoxes lead to defensive reactions, and managing these tensions requires organizations to develop a paradoxical mindset. Whilst we know how organizations have managed paradoxes (e.g. Calabretta, et al., 2017; Sundaramurthy & Lewis, 2003), the outcome of not managing paradoxes is a vicious cycle, portrayed as negative reinforcing cycles that leads to organizational inertia, decline, and failure. Yet, we know little about the unfolding dynamics of vicious cycles and how different reinforcing cycles interact in a vicious cycle. Understanding the dynamics of vicious cycles is important because they can have destructive effects on organizations and employees. Vicious cycles also hold the potential for understanding the link

between attempts to ‘manage the paradox’ and employee experiences and responses. By examining the tensions created by the strategic intent paradox, we trace the feedback loops in a vicious cycle to answer our two research questions about how the dynamics of a vicious cycle unfold, and how feedback loops interact in the dynamics of a vicious cycle. We contend that by addressing these questions helps us bridge the gap between individuals experiencing vicious cycles and organizations managing vicious cycles.

3. Methodology

3.1. Research Context

The context of the research is SigmaGroup¹ a design firm, delivering graphic, digital, interior, and architectural design services, headquartered in Glasgow, UK, with offices in London and Dubai, employing around 40 staff. Formed as Sigma in 1997 by two university friends (Henry and Brian²), the firm grew to around 25 people providing graphic design and interior design services primarily to higher education and other public sector clients (such as Scottish Enterprise) in 2005. In February 2006, Sigma merged with a local advertising agency creating a united SigmaGroup. The new organization was a firm with five partners, of approximately 60 people, working on a full range of design disciplines spanning many industry sectors (see Table 1 for historical timeline of the organization). SigmaGroup’s vision was to become a leading design firm, recognised for its creative insight and comprehensive solutions. SigmaGroup was an appropriate context for this research study for two reasons. First, design firms have proven to be an appropriate setting to study innovation tensions and challenges, and their management (e.g. Alvesson, 1995; Andriopoulos & Lewis, 2009; Robertson & Swan, 2003; Sutton & Hargadon, 1996). Hence, there is a demand for the case organization to excel

¹ All company names have been changed for anonymity purposes.

² All participants have been given a pseudonym.

at both exploitation and exploration. Second, similar to Andriopoulos and Lewis's (2009) study, for the organization to develop further its expertise, it "must identify opportunities to both leverage their existing competencies as well as new capabilities" (Andriopoulos & Lewis, 2009: 698). The design sector resembles other sectors within the creative industries, such as product design and arts organizations, as well as other professional services firms, such as management consultancies and law firms.

The context of this study is a Knowledge Transfer Partnership (KTP) set up by Sigma with a local University "to facilitate the successful transition to a dynamic company whilst optimising its creative skills in the new business direction" (KTP Proposal and Application Form, 2003). The project would lead to the development of "a series of future strategies that the company will adopt and implement that will create a structured way forward...This could cover strategies such as geographical relocation or expansion, core business diversification or migration" (KTP Proposal and Application Form, 2003). The first author was recruited in 2005 to pursue this project and was placed at SigmaGroup for the duration of this two-year project. Part of his role was to lead an 'integration team' whose scope was to bring to the table a set of actions and activities that would help define SigmaGroup, and integrate human resources, knowledge and expertise, necessary systems and procedures, and organizational cultures of the merging organisations. This would solve urgent problems and formulate a plan of action for the future to make the new firm the most successful design organization in the UK (Integration Team Plan, 2006). While pursuing the KTP Project, the first author took on the extra role of Account Executive. Following the completion of the KTP Project, the first author was employed as an Account Manager for the period of 2007-2008.

INSERT TABLE 1 ABOUT HERE

3.2. Ethnography

Our research is a single case ethnography drawing on material gathered through “a wide range of observational techniques including prolonged face-to-face contact with members of local groups, direct participation in some of the group’s activities, and a greater emphasis on intensive work with informants” (Conklin, 1968, p. 172). An ethnographic case study design is powerful for uncovering “ambiguities and obscurities of social life” (Ybema, Yanow, Wels, & Kamsteeg, 2009, p. 2) and building new theory (Siggelkow, 2007).

Ethnography requires that the researcher takes a reflexive approach by maintaining a level of self-awareness and recognising that research findings are co-constructed with the research participants (Gilmore & Kenny, 2015; Hardy, Phillips, & Clegg, 2001). Such an approach generated a comprehensive account of organizational tensions, goals, and routines, whence the authors were able to draw to theorise vicious cycle dynamics and the role of feedback loops. With ethnography, the first author was accepted as a regular member by the social group under study (SigmaGroup senior management and staff) which allowed him to understand behaviours that perpetuated in the organization.

Our research findings combine the first author’s own reflective account with interview and archival data. With his reflective account, and in an autoethnographic manner, the first author was able to look inward to reveal a ‘vulnerable self’, provide a reflexive critique of his experience and articulate the way he was moved by, and through, his cultural interpretations. By doing so, the first author’s “personal experience becomes important primarily in how it illuminates the culture under study” (Ellis & Bochner, 2000, p. 740). The first author’s

proximity to the organization provides a significant advantage because in autoethnography, it is not objectivity but proximity that becomes the epistemological point of departure and return (Adams, Holman, Jones, & Ellis, 2015). The first author was able to examine himself in the context of the organization, and make “conscious an experiencing of the self as both inquirer and respondent...” (Kempster & Stewart, 2010, p. 211).

Over the course of over three years of involvement, the first author became an integral part of the organization under study working alongside SigmaGroup senior management and staff and having unrestricted access to organizational documents, policies, and meetings. This meant that he was able to observe organizational actors’ behaviour and understand work routines and problems. He also took part in social activities after office hours. The direct involvement with SigmaGroup meant that the first author, like his colleagues, experienced first-hand the tensions generated, was able to get closer to his colleagues’ struggles and defensive reactions as well as act defensively himself, and lived through the impact of these defensive behaviours on processes and resources. This ethnographic approach spurred a nuanced interpretation of the organization’s practices, and senior management’s and staff’s perceptions and actions. It also allowed “personal experience as a way into, and/or means for, describing and understanding cultural [e.g. organizational] experience as fully, complexly, and evocatively as possible (Adams et al., 2015, p. 85). This is particularly advantageous to paradox research because “paradoxes are local, embedded, and sensitive to time and history, and therefore, aligned with particular circumstances. [Hence,] scholars need to capture these circumstances in developing practical recommendations for responding to paradoxes” (Cunha & Putnam, 2019, p. 100). According to Putnam et al. “in-depth case studies and ethnographies can capture key features of both time and context... [to track] how tensions develop over time, in socio-historic conditions, and in connection to specific reference points or outcomes” (2016, p. 136).

3.3. Data Collection

The research data was gathered at two different stages. The first stage spanned the first author's placement and subsequent employment at SigmaGroup for the duration of three years and three months (2005-2008). During this time, the first author gathered data through interviews with senior management and clients, a staff survey, and participant observation. The latter was possible as he was placed at the organization where he participated and/or led company meetings and events. These direct participant observations generated the first author's personal narrative, from which the authors were able to draw later. The second stage included data collection through in-depth interviews with former and current SigmaGroup employees conducted in 2013. At that stage, first author had left SigmaGroup's employment and had joined academia.

The analysis draws on three main data sources: the first author's own reflective account (through participant observations and reflection), eleven semi-structured interviews, and archival data. Thus, the first type of data was the first author's own experience in the form of a personal narrative. The first author started by writing a draft of his story making retrospective field notes on his work life at SigmaGroup including all the details he could recall (assisted by his own work diaries), trying to organise everything chronologically (Ellis & Bochner, 2000). We recognise that these experiences took place in the period 2005-2008, thus a significant time has lapsed. However, this does not undermine the rigour of our study because Parry and Boyle argue that "organizational autoethnography is oriented so strongly toward the past, [one] cannot use the criterion of historical bias to detract from the validity of the research. In fact, [Parry and Boyle] advocate that the historical dimension is the strength of organizational autoethnography. In retrospect, and in the cold hard light of day, and with all the emotionality drained from the narrative, the reader can appraise the validity of the contribution to theory more clearly" (Parry & Boyle, 2009, p. 698). Similar to Pelly's (2017) study in which there

was a six-year lapse between the description of events and their occurrence, such historical dimension is advantageous to our study because retrospective recall can be a rigorous sense-making approach (Ellis, 1999; Fletcher, 2007; Rambo, 2005) which allows those involved in the research study to “reformulate past experiences to incorporate their current understanding of a phenomenon” (Pelly, 2017, p. 393). The first author used what Ellis and Bochner (2000) describe as ‘emotional recall’ where one imagines oneself being back in different scenes emotionally to remember the details of the experience. Then ‘systematic sociological introspection’ allowed him to not only ‘get inside’ the emotional experience but also ‘move around’ in the experience to see as it might appear to others (Ellis, 1991; Ellis & Bochner, 2000). This produced a narrative rich in emotion and reflexivity.

The second type of data included semi-structured interviews conducted in two different chronological periods. All interviews followed two sets of pre-determined protocol guides (one for each different period) to ensure consistency while allowing flexibility in the discussion. There were two interviews with the two managing partners of Sigma conducted in June 2005 (first stage of the study), where the first author made interview notes throughout the discussion, and nine interviews conducted in the period June-November 2013 (second stage of the study) including the same two partners as well as other current or former employees of SigmaGroup. This set of interviews was voice-recorded and transcribed verbatim. The duration of each interview (both stages) ranged from one hour to two and a half hours, producing 10 pages of notes (first set) and 550 pages of transcribed text (second set).

Even when the respondents were former employees of the organization, those respondents were able to reflect on their experiences at SigmaGroup. The advantage of interviewing people who used to be employed by the organization is the fact that they have had the time to reflect on their experiences. The disadvantage of involving former staff members of SigmaGroup in this study is that there might be an element of bias in their responses either

because they left the organization in bad terms or because the time which lapsed between their departure and when the interviews were conducted, might have altered their memories making their thoughts towards SigmaGroup rather negative. However, from another point of view, the time lapsed might have given them the opportunity to reflect on their experiences and approach these from a different angle. In many cases, participants provided narratives about the imbalance of breakthroughs and profits at SigmaGroup on an individual and on organizational level which were rich in emotions. Retrospective narratives can be emotionally rich because “most working people easily recollect intense emotional experiences that punctuated their careers and reverberated across their relationship networks” (Waldron, 2000, p. 64). Table 2 provides details of each participant and their current or former job roles at SigmaGroup.

INSERT TABLE 2 ABOUT HERE

The third type of data included archival data gathered over a number of years including documents produced by the firm or the first author (while employed by SigmaGroup), such as organizational brand plans, financial accounts, company credentials and pitch presentations, meeting minutes, work diaries, internal and external briefs, and a staff survey, dating back to as far as 2002. These documents enabled us to anchor the first author’s personal narrative and the interview data in events over time and to reflect on the organizational phenomena in much greater depth (Table 3).

INSERT TABLE 3 ABOUT HERE

3.4. Data Analysis

Our data analysis combined the data gathered from interviews with first author's own reflective account, and archival documents that supported and provided further illustration of the phenomena. Our data analysis started with open coding the interview transcripts by naming and categorising emerging phenomena of senior management's and staff's perceptions and behaviour as described in the data (Corbin & Strauss, 2015). Parallel to this, we reviewed the first author's reflective narrative and the archival documents available. The interview codes were then clustered into themes and were combined with main themes arising from the reflective narrative and the archival documents. We then discussed the relationships among the emerging overarching themes at more abstract level seeking to interpret the data and how it interacts with extant literature on vicious cycles. We systematically and repeatedly "interrogated the interview data against the [first author's] pre-understanding based on his immersion in [the SigmaGroup] setting, as well as against extant literature" (de Rond & Lok, 2016, p. 1971).

Similar to Jarzabkowski, Lê, and Van de Ven (2013) and Smith (2014), we followed an iterative (abductive) mode of analysis (Locke, Golden-Biddle, & Feldman, 2008) continuously shifting between the first author's narrative, interview transcripts, archival data, and extant literature. Various iterations were repeated which allowed us to take a more reflexive approach (Alvesson & Sköldberg, 2017). It also enabled a triangulation with multiple sources of data and increased the internal reliability of the interpretations. We repeated many iterations between our data and literature, constantly revising our vicious cycle model. We shifted our analysis back and forth "to illuminate the relationship between the individual and the organization" (Parry & Boyle, 2009, p. 691). In accordance with Strauss (1987) and following the example of Essén and Värlander (2013), we conceptualised the data, raised some questions, "provided some provisional answers about the relationships among and within the

data...[which] enabled us to open up an enquiry about the data, to complicate it and expand it, and hence move toward interpretation” (Essén & Värlander, 2013, p. 405).

In order to ensure qualitative rigour while still retaining the potential for generating new ideas from the data, similar to Smith (2014) and Es-Sajjade, Pandza, and Volberda’s (2020), we provide a data structure display (Figure 1) drawing from Gioia, Corley, and Hamilton (2013). Figure 1 illustrates how we finally arrived at vicious cycle themes interweaving all data sources together: the first author’s personal reflection, interview transcripts and notes, and archival data. Representative quotes supporting our second-order themes and aggregate dimensions are provided in Table 4.

Our theoretical insights arose from trying to make sense of the aggregate dimensions. We realised that the themes we uncovered were over time and interrelated. Our ‘ah-ha’ moment was recognising that the theoretical contribution lay in the arrows that connect the thematic boxes that we had developed through our coding. By focusing on the arrows that connect, we developed the vicious cycle model, paying attention the sequence of actions that unfolded and generalising a complex systems model from the themes.

INSERT FIGURE 1 ABOUT HERE

INSERT TABLE 4 ABOUT HERE

4. Findings

4.1. Strategic intent, defence mechanisms, and impact

By coding the descriptions of the experiences of the first author and SigmaGroup's senior management and staff which were developed in conjunction with archival data, we interpreted the data to three key themes that encompassed the vicious cycle experience: paradox of strategic intent, defence mechanisms, and their impact.

4.1.1. Strategic intent paradox at two organizational levels

Our data shows that SigmaGroup faced the strategic intent paradox of pursuing profit *and* breakthroughs. We identified the two poles of the strategic intent paradox on two levels: senior management and staff. This is a novel finding because prior research has identified the poles of the paradox as “nested (i.e. one level informs the other) and interwoven (one tension informs the other tension)” (Cunha, Giustiniano, Rego, & Clegg, 2017, p. 141), but have not recognised that nested and interwoven operate at two distinct organizational structure levels.

Management push for breakthroughs (exploration). At the senior management level there was a push to develop breakthrough ideas rather than focus on mundane design projects. Senior management were concerned that the firm was no longer working on novel ideas: “[SigmaGroup]...was so big that...the quality [of work] had disappeared...and it was a big machine...and the churn...and it spent more time navel gazing and looking inwards than it did looking outwards...in terms of being at the forefront knowledge wise of what was happening” (Henry). SigmaGroup's ambition was to become a leading design firm, known for its creativity, instead of being merely a ‘churning-out machine’. To achieve this ambition, senior managers wanted staff to take risks and work on ground-breaking and exciting projects. The goal was to enhance its reputation as a leader in creativity and “create a portfolio of work that you just know can blow people away” (Brian). Senior managers often spoke in lofty terms about the

importance of creative design and pushed the pursuit of breakthrough projects to boost SigmaGroup's creative reputation. Senior management showed their commitment to exploration and breakthrough ideas by initiating the KTP to achieve their creative vision.

Staff emphasising profit (exploitation). At the staff level, the reality was working on incremental and repetitive projects such as retail adverts for print, website content updates, email promotions, and mundane architectural work. The first author's role became focused on his Account Executive role with clear and achievable goals. As an Account Executive, he was generating immediate results by working on small but profitable projects and becoming part of an account management team. The more ambitious Business Development KTP role initially planned faded away. This was a common experience for all at the staff level. The nature of the work pursued was incremental in the architecture side of the organization. "We did some flats, which were design and build so they are handed over to a contractor and the contractor was left to finish the detail so there's nothing of quality about them" (George). Staff felt desperate to maintain a healthy cash flow and there was not any filtering of the work being pursued, "...I don't think there was any real control over the type of work that was coming in...[we would] almost do anything" (Anthony). "Consequently, there was not much work produced worthy to be put up in the company's website" (Garry). This shows that at the staff level the focus was on the profit and exploitation pole of the paradox.

4.1.2. Defence mechanisms

Our data shows that senior management and staff engaged in defensive behaviours. We found a variety of defence mechanisms but not all of the ones identified in the literature (Lewis, 2000). Our data showed senior managers and staff engaging in regression, splitting, and ambivalence.

Regression by senior management. Senior managers' aim to foster an environment of exploration led them to fall back on past practices of 'free-rein' management approach which was one always pursued in the past when Sigma was still a small design studio. Such an approach was familiar to all of those, including the first author, who had been working at Sigma prior to the merger with the advertising agency. The Sigma style had always encouraged staff to be a very relaxed group of professionals. "[Sigma has] always been a company that is serious enough and believes in itself enough but not too seriously, likes a laugh, likes a carry-on..." (Brian). The organisation had been described as "quite a young and vibrant" (Michael); it used to be dynamic, full of energy, where you could learn so much off many different people (Cameron). Senior management were attempting to re-create this laid-back Sigma atmosphere. For example, at SigmaGroup, Fridays were fun days; after lunch there was a jubilant atmosphere in the office where beers were handed out to all staff and everyone was winding down way before the end of business hours. Then after five o'clock, staff would usually head to the pub for few more drinks. "It's strictly [SigmaGroup's senior] management style...we are more likely to go all 'look everyone, it's been really nice this week, let's all have some beers'...in the middle of the day, than write up the notes from the meeting that the person just been to. And there's something nice about that, but it's also...self-harming too" (Garry). SigmaGroup senior management's style sought to give employees 'free-rein' to be creative. But this was a regressive defence mechanism, falling back on the security of what worked in the past.

Ambivalence and splitting by staff. In response to senior management's push for breakthroughs, staff felt lost, confused, frustrated, angry, and anxious about their role within the organization. Their defensive responses involved ambivalence and splitting. The first author had mixed feelings about pursuing the two different roles that he had. Working with the Business Development Manager to explore ambitious projects, and the Account Executive role focusing

on internal processes and existing clients, were often in conflict. He felt powerless and a mix of anger and anxiety as he was pulled in two different directions. The first author's ambivalence was echoed by other colleagues. Staff's performance was compromised by their conflicting emotions leading to lukewarm reactions to calls for ambitious projects. "I think everyone was just trying to do their bit to get by and I think getting by is just not good enough.... the love comes out of it when it's like...just doing enough like...to get paid and go home...To me [design is] the kind of business where you've got to love what you do,...you've got to be passionate about it" (Anthony). As a result the creative work produced lacked quality. Staff reported "[opportunities] missed that just [went] into the drawer of shame, [full of] 'what could have been [projects]'" (Anthony). For instance, while pursuing a global client project, "[SigmaGroup's] own naivety...meant that [it] produced...thousands of really quite average or bad work, because it was all needed too quick and too soon" (Garry).

A second defence mechanism found in staff's behaviour was splitting which includes forming subgroups. Staff rallied around the people they knew and trusted from their previous associations because it felt more safe and convenient generating silos and subgroups. Staff acted defensively, sticking with the people they had worked with or dividing themselves on the basis of their discipline. A 'them and us' attitude often led to team conflicts. For example, within the first author's account management team, one part was working on digital projects, and another on graphic design and advertising projects, and there were rarely meetings with the whole team. The first author often felt torn between two sides because he was working on managing clients from both the graphic and the digital side of the business which were headed by directors with competing interests and teams who were often at loggerheads with each other. The first author would often attend separate meetings with each side where his colleagues would endlessly gossip or complain about the other side of the team. Even worse, at times, he would be urged to keep secrets from the rest of the team about conversations with clients in

relation to their work, budgets, as well as in relation to securing extra projects from them. Other colleagues concurred. For example: “[Two senior managers] both asked me [separately] if I would go with them when they were planning their exit. I felt a bit pulled,...almost...stretched across the two of them. I also still had at that stage...loyalty to the people who effectively they were leaving,...there was all sorts of politics behind the scenes...” (Michael).

4.1.3. Impact

We identified impact as a distinct theme arising from the data. We categorised ‘relaxed management style’ and ‘resource scarcity’ as impact at the senior management level and staff level respectively. While this theme does not align with prior theorizing of paradoxes, we found that impact acted as feedback loops between the poles of the paradox and between defence mechanisms. The impact of senior management’s defensive behaviour was that it led to relaxed management style evidenced by senior management’s lack of attention to the need for operational and creative processes at the organization. Subsequently, there was a lack of project scheduling and invoicing processes (operational), and a lack of briefing processes which would affect the time available to carry out quality creative work (creative). Lacking the necessary processes led to a lack of cash flow management and time available to deliver quality work (resources scarcity). We show how these impacts are nested within senior management and staff experiences.

Relaxed management style (senior management level). Senior management’s regressive defensive behaviour manifested by the ‘free-rein’ management approach with which they sought to push for breakthroughs led to a relaxed management style. “What we’re actually trying to [do is] ‘manage not managing’. That’s the great problem about this industry,...you’re trying to instil sometimes mathematical sciences into the creative process and [so] you immediately stifle the creative process” (Brian). Such management style was evidenced by their lack of attention to the need for operational and creative processes at the organization. For

example, when it comes to the briefing process, Brian emphasised that “by not doing that [briefing] we don’t limit ourselves to being prescriptive to what the client wants because actually what I’ve found in doing this job for so long is that a lot of the time the client has actually no idea what they want and they only tell you what they want because that’s the way they’ve been trained to think”. Brian described senior management’s style with the following: “I think we’re like Barcelona, I give them the ball and just let them run with it...For me it’s not really about managing the process. I manage the process by not necessarily trying to manage it too much. I’ll just put down the flags and say, ‘there’s your park to play in and there’s the ball – go and play with it’”. Even when the SigmaGroup senior management set up an integration team (and assigned the first author the responsibility to run it) to integrate resources and processes, the legacy of its outcomes was very short-lived as they did not have the required support from senior management. Many of the recommended and updated processes were not kept up and disappeared after few weeks due to senior management’s relaxed management style which did not promote the adoption and maintenance of such processes.

Resources scarcity (staff level). The relaxed management style present at SigmaGroup led to lack of operational and creative processes and created an impossible situation for staff as they were faced with the harsh reality of lacking well-managed cash flow and necessary time to do their job well. The lack of operational processes was threatening the very existence of the organization due to limited cash flow. Inappropriate billing processes meant that the organization often charged clients too much in advance and there was no money coming in at latter stages. “[SigmaGroup] front ended on the fees so there was loads of money coming in at the very start which was paying a legacy of debt for other projects and [at] the end of the project where there was a lot of detailed design required or solutions required, there was no money coming in to pay for the time” (George). There was neither the steady cash flow nor the time

which would allow staff the flexibility of pursuing breakthrough projects. Urged by SigmaGroup's finance team, individuals would often have to chase clients for payments on an ad-hoc basis while trying to figure out what the organizational process should be.

Along with cash scarcity, staff also experienced time scarcity. The time dedicated to delivering quality of design work was inadequate as studio time was not protected and staff were often stretched across many tasks. "When there was the director saying 'you can't work on that anymore you've got half a day to provide a solution'..., if you've got half a day you take the logical option to answering your director's response...which is ultimately restricting your creativity" (George). Staff were often asked to move from pursuing a task for one project to delivering a task for another project, without consideration of the disruptive impact on the creative process. For example, while analysing the results of a client survey about improving SigmaGroup services, the first author was interrupted and asked to look for and get access to market reports for the UK furniture industry so that senior management can present this information to a client shortly after. Michael's comments echo the first author's experience: "I think designers [were getting] quite annoyed, as they [were feeling] that they're just getting dumped with stuff, that they're not being given a proper brief. I've done it myself, where if you come off the phone to a client and you're not quite sure in exactly what they want but...they want it tomorrow...And the easier thing to do is just 'oh [will you] just come up with something?'. I think the more...the account managers...are stretched, the less time they have to put in any thought...and things just get thrown at designers..." (Michael). Time scarcity meant unfinished projects, avoidable delays and growing frustration. For example, Michael described SigmaGroup's unpreparedness due to time scarcity which was resulting in inadequate quality of design work presented to clients. "I often felt that we almost exuded a bit of panic when we were going [to] pitches, it was almost like you could tell that we'd been up

the night before because we were still running things through and...things weren't quite polished or...we were 5 minutes late" (Michael).

4.2. Vicious cycle dynamics model

In this section we bring together the themes from our data into a vicious cycle dynamics model (Figure 2). Based on our abductive analysis, moving back and forward between our data and extant literature, we developed this model which addressed the key empirical puzzles that underpin our theoretical contributions - Why did the setting of ambitious goals by senior managers and their push for breakthrough projects lead to the opposite, staff working on mundane projects? How did the vicious cycle stabilize over time? Which micro-processes are involved in perpetuating a dynamic stability? Theoretically, we draw on feedback loops, reinforcing cycles and circular causality, terms which originate from complex systems thinking (Richardson, 1991; Von Foerster, 2007). We use feedback loops as a generic term that encompasses ongoing and interrelated actions that unfold over time; one action influences the other which in turn loops back to influence the first action. By reinforcing cycles we mean a combination of processes that sustain a state. In our case we show how different reinforcing cycles sustain the two poles of the paradox. These reinforcing cycles are important to recognise because they hold the potential for interventions to change the vicious cycle dynamics. By circular causality we mean a reciprocal coupling of two states; in our case the two poles of a paradox. The concept of circular causality is challenging because it goes against established understanding of phenomena as cause and effect. However, as Tsoukas and Cunha (2017, p. 406) note, "cultivating sensitivity to circularity requires a different way of understanding organizations and organizing". Theoretically, we refine the definition of a paradox as interrelated and interdependent by showing how the two poles of a paradox are interrelated through circular causality: exploration causes exploitation causes exploration and so on. We

elaborate on micro-mechanisms and reinforcing cycles and show how they lead to circularity causality as a dynamically stable vicious cycle.

INSERT FIGURE 2 ABOUT HERE

The inner part of Figure 2 shows two levels of defence mechanisms that were triggered in senior management and staff. The right-hand side of the inner part of Figure 2 shows the impact of the defence mechanisms. Senior management's defensive behaviour led to relaxed management style evidenced by senior management's lack of attention to the need for operational and creative processes at the organization. This relaxed management style led to a lack of cash flow management and time available to deliver quality work (resources scarcity). To assist the reader, we use a numbering system to indicate which part of Figure 2 we refer to in this section.

4.2.1. Circular causality (exploration > exploitation > exploration)

The outer part of Figure 2 demonstrates the tension between senior managers' push to achieve breakthroughs and the focus of staff on profit; this tension is the strategic intent paradox. Senior management's push for breakthrough projects (exploration) was generating the opposite result on staff level, i.e. an overemphasis on profit projects (exploitation). This in return was making senior management view SigmaGroup as churning machine which had lost its creative mojo pushing even further for breakthrough projects and exploration to improve the firm's creative reputation (see Figure 2 – arrows 1). The more senior management pushed staff to embrace risk-taking and work on 'blue-sky' projects to generate work that would blow people away with its creative flair, the more the first author and his colleagues focused on the 'already-known', pursuing mundane work which would maintain a healthy cash flow.

The figure is divided into senior management level, where we find the exploration pole of the paradox, and the staff level, where we find the exploitation pole of the paradox. In order to understand how and why this circular causality exists, we need to look at the reinforcing cycles that create this *dynamic stability*.

4.2.2. Reinforcing cycles

Both poles of the paradox are reinforced by defence mechanisms. In pursuit of creating the right environment for breakthroughs, senior managers used regression as a defence mechanism (see Figure 2 – arrow 2) to emphasize exploration. As time unfolded and senior managers still found themselves in the situation where the company was not developing breakthrough ideas, they re-emphasised exploration by drawing on what worked in the past. Defence mechanism of regression continually reinforced the action taken by senior managers.

At the staff level, we see the defence mechanisms of ambivalence and splitting leading to an over-emphasis on profit, reinforcing exploitation (see Figure 2 – arrow 3). Faced with scarcity of resources, staff struggled to figure out how to pursue breakthrough projects. A ‘them and us’ splitting provided security of past coalitions against the anxiety, anger, and frustration experienced on a daily basis. Defence mechanisms of ambivalence and splitting continually reinforced the coping actions taken by staff. The first author had mixed feelings about his two different roles at SigmaGroup, and he and his colleagues felt pulled in different directions heightening their negative feelings. Acting defensively, staff also separated themselves in safe silos sticking with those colleagues they had worked in the past, avoiding any integration with the rest, which led to reinforcing mundane projects.

4.2.3. Micro-mechanisms

The reinforcing cycles are fuelled by micro-mechanisms. Senior management regression led to a relaxed management style and focus on removing procedures and processes to ‘let them run

with it'. This freedom was experienced by staff as lack of attention to the need for operational and creative processes. While removing processes could have enabled creativity, staff experienced this as resources scarcity, depriving them of the necessary cash and time to do their job effectively (and consequently pursue breakthrough projects which was pushed for by senior management). Staff coped with the relaxed management style by demonstrating ambivalence and splitting (see Figure 2 – arrows 4). The senior management's relaxed management style was jeopardising the very thing it had intended to foster, i.e. creativity, by removing any attention to operational and creative processes necessary for delivering excellent creative services. Faced with limited cash flow and pressured with time, the first author and his colleagues were asked to move from one project to another in an erratic and disruptive way, producing results of inadequate quality, unable to work on breakthrough projects which they had been urged to pursue by senior management.

Overall, the vicious cycle model demonstrates a dynamic stability; senior management and staff continue to take actions to address what they perceive to be a problem (i.e. dynamic), but find themselves repeating the same cycle (i.e. stability). The circular causality, reinforcing cycles, and micro-mechanisms are key to understanding how the dynamic stability of the vicious cycle is maintained.

5. Discussion

We started this paper by identifying a need for theorizing paradox dynamics. According to Schad et al. (2016, p. 29), “studies of paradox dynamics offer a valuable process perspective, providing insights into...the vicious and virtuous cycles over time”. Despite this only less than a quarter of paradox studies investigate the dynamics of paradox, and even less explore virtuous and vicious cycles (Schad et al., 2016). Our aim in this paper was to understand the unfolding dynamics of vicious cycles and address this gap in our understanding of paradox. In particular,

we developed a vicious cycle dynamics model, identifying key circular causality, reinforcing cycles, and micro-mechanisms. Vicious cycles unfold over time, result from the interaction of defence mechanisms at multiple levels, and can lead to counter-intuitive responses to attempts at intervention. In this section we present the two main theoretical contributions of this paper and discuss its implications for future research.

Firstly, our study contributes to the paradox literature by focusing on the unfolding dynamics of a vicious cycle. The paradox literature in general has focused on identifying and managing paradoxes, rather than the experiences of individuals and groups facing paradoxes (Schad et al., 2016). Given that paradoxes persist in time, understanding the unfolding dynamics of paradoxes is an important, yet under-researched area. More specifically, one of the outcomes of paradoxes that is under-researched is the dynamics of vicious cycles.

Our vicious cycle model can help scholars and practitioners better understand how individual actions and organizational behaviour are inter-connected through feedback loops. By drawing on complex adaptive systems thinking, we show how feedback loops combine to produce dynamic stability. We demonstrate circular causality in vicious cycles. This is useful because provides insights into why vicious cycles persist over time. Our findings point to three counter-balancing defence mechanisms operating at the senior management and staff levels. Prior research has established that vicious cycles trigger defence mechanisms (Smith & Lewis, 2011; Vince & Broussine, 1996). Our vicious cycle dynamics model combines three defence mechanisms – regression by senior managers and ambivalence and splitting by staff – that work counter to each other. The combination of these feedback loops explains why the more senior management tried to create a culture for breakthroughs, the more it led to an increase in incremental projects, which in turn led to renewed push for ambitious projects. The existence of feedback loops adds to our understanding of interconnectedness of defence mechanisms in a vicious cycle which links senior management attempts to employee experiences.

Our findings also demonstrates the role of a lack of paradoxical thinking in perpetuating paradoxical tensions over time. Recently, scholars have argued that individuals with paradoxical thinking or mindset accept tensions which enables them to “fully capture ambiguous and complex configurations of reality, and can thus contribute to innovation” (Miron-Spektor, et al., 2018, p. 30). Whereas paradoxical thinking can enable individuals to appreciate and manage paradoxes, our case shows that organizations can struggle to engage with tensions, thus perpetuating a vicious cycle. Echoing Miron-Spektor et al.’s (2018) work, our story shows that with low paradox mindset, experiencing tensions was detrimental for staff’s in-role job performance and innovation, which led to more emphasis on incremental projects, aggravating the tensions further.

Secondly, our themes helps scholars and practitioners better understand how individual actions at staff and senior management levels are connected through defence mechanisms. Our findings demonstrates that both staff and senior management resorted to defence mechanism which led to a vicious cycle. In our case we observed an environment created by senior managers which did not foster paradoxical thinking. They did not encourage paradoxical thinking because they did not recognise latent tensions generated by strategic intent, but merely acted defensively pursuing a ‘free-rein’ management approach. This was combined with staff’s own lack of paradoxical thinking.

Understanding how individual actions by staff and senior management are connected through defence mechanisms is important because it is the interaction between three defence mechanisms that generates dynamic stability and perpetuates the vicious cycle. A key implication of this is that vicious cycles are harder to identify than previously thought. Our findings suggests that dynamically stable vicious cycles can exist, making it harder to understand the circular causality simplistically in terms of positive (virtuous cycles) and negative (vicious cycles) as extant literature has thusfar indicated (Lewis, 2000, Smith &

Lewis, 2011). For example, whereas Andriopoulos and Lewis (2009) found several nested tensions within the strategic intent paradox, our study, based on privileging circularity, suggests that nested tensions do not coalesce neatly around the two poles of a paradox. This means that the existence of a vicious cycle on organizational level, does not necessarily imply an overemphasis on one pole of the paradox which is what other scholars have suggested (Masuch, 1985; Smith & Lewis, 2011). A vicious cycle can be generated by organizational members pushing for one pole while others (within the same organization) push for the opposite pole; together such actions create a dynamic stability which perpetuates the vicious cycle on the organizational level.

Our research also suggests that the solution to vicious cycles is not as straightforward as managerial intervention to shift the cycle and create virtuous cycles. Counter-balancing feedback within a vicious cycle make it difficult for managers to stop these cycles. Whereas as prior research (Huq, Reay, & Chreim, 2017) has suggested that paradoxes need to be protected by taking into account the neglected or weaker pole, our findings suggests that this can be hampered by defence mechanisms at different levels.

Scholars and practitioners will benefit from understanding the dynamics of vicious cycle presented in this paper because it demonstrates how such cycles unravel and become reinforced within organizational settings. Future research can examine different vicious cycles, and identify feedback loops that create reinforcing cycles. Future studies can also include different organizational levels, addressing multiple nested feedback loops that can lead to dynamic stability in vicious and virtuous cycles. We suggest that future research needs to move away from clear-cut distinctions between the two poles of a paradox and uncover unfolding dynamics that can create self-stabilizing loops.

6. Conclusion

The overarching aim of this study was to provide a thorough account of the unfolding dynamics of a vicious cycle. By focusing on the strategic intent paradox in a design firm, we demonstrate how feedback loops can create dynamic stabilizing vicious cycles that address both poles of the paradox, making it difficult to identify and intervene in the paradox dynamics. This paper develops a complex systems approach to paradox offering a better appreciation of the dynamics of vicious cycles, an area which has received less attention in extant literature. A paradox lens has a lot to offer in terms of unravelling dynamics, such as the one between pursuing creative, breakthrough ideas, and incremental, profit-seeking projects. Although based on a single case study, which limits our claim to generalizability, we believe that our theoretical themes offer new insights and directions for paradox researchers. The unfolding dynamics of vicious cycles and paradoxes are complex, requiring attention to circular causality, reinforcing cycles, and micro-mechanisms.

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Table 1: Organization Timeline

Year	Details
1997	Sigma founded by two university friends (two founding partners).
1998	Period of growth and expansion.
1999	Period of growth and expansion.
2000	Period of growth and expansion.
2001	Economic downturn leads to account losses and need for re-organization.
2002	Period of re-organization.
2003	Period of re-organization.
2004	Sigma starts working with an architectural practice on ad hoc projects.
2005	Sigma joins forces with the architectural practice to create an architectural division. Sigma has three partners. First author joins the organization.
2006	Sigma joins forces with a regional advertising agency to form a larger creative firm. SigmaGroup has five partners.
2007	Period of re-organization.
2008	Economic crisis hits SigmaGroup. First author leaves the organization.
2009	Senior manager takes digital division. One founding partner leaves the organization.
2010	Period of contraction and re-organization.
2011	Period of contraction and re-organization.
2012	SigmaGroup starts working with international clients.
2013	Period of growth and expansion.
2014	SigmaGroup opens office in London and Dubai.

Table 2: Participants

Participants	Role at SigmaGroup	Time at SigmaGroup
Henry	Managing Director / Partner	1997-2009
Maurice	Senior Designer	2003-2005
Brian	Managing Director / Partner	1997-Present
Garry	Creative Director	2005-Present
George	Architect	2003-2009
Cameron	Senior Designer / Creative Director	1997-2010
Anthony	Designer / Senior Designer	2003-2008
Victor	Senior Designer	2004-2007
Michael	Account Manager	2005-2009

Table 3: Archival Documents

Year	Documents
2002	Client Satisfaction Research Debrief (2002)
2003	KTP Proposal and Application Form (KTP Project Plan) (2003)
2004	Sigma Brand Plan Enhancing User Experience Credentials Presentation document Pitch document Company Financial Accounts
2005	Personal Work Diary & Notes Communication Brief – Client KTP Associate – Job Advert Presentation to Client document Company Credentials Company Competitors Analysis (PhD) Company Competitors Notes (PhD) Outside View Project Presentation – Competition Analysis (PhD) 2 x Managing Director interview notes (PhD) 1 x Managing Partner – interview notes (PhD) 1 x Finance Manager interview notes (PhD) 7 x Client structured interview – notes (External Client Review) (PhD) 10 x Client Assessment Document (Internal Client Assessment) (PhD) 13 x Studio Survey Documents (PhD)
2006	Personal Work Diary & Notes SigmaGroup Brand Plan Company Induction Information Company Brand Experience Plan (PhD) Business Development – Competitors Report Integration team – Business Development / Forecasting Team – Meeting Minutes – 13/04/06 Integration team – Company Culture Team – Meeting Minutes – 13/04/06 Integration team – Meeting Minutes – 26/05/06 Integration team – Meeting Minutes – 03/07/06 3 x Integration team – Brown Paper Exercise – Meeting Minutes – 24/07/06 Integration team – Brown Paper Exercise – Meeting Minutes – 02/08/06 Integration team – Brown Paper Exercise – Meeting Minutes – 09/08/06 Company Website Brief Company Website Plan
2007	Personal Work Diary & Notes Research Brief template Company Newsletter Brief Company Newsletter Company – Client Debrief – 07/10/2007 Company Job Brief KTP Project Deliverables Report
2008	Personal Work Diary & Notes Client Creative Brief Office Plans – Teams Doctoral Thesis

Table 4: Interpretation of Second-Order Themes – Supporting Data

Aggregate Dimension	Second-Order Themes	Representative Quotes
Strategic intent paradox	Management push for breakthroughs (exploration)	<p>“[Our organizational personality should combine] some of the comfort that the big players offer – <i>Conran, Foster</i>, etc...but with the approachability of the current [Sigma] and the excitement, the originality and energy of someone fresh out of art school and the business brain of <i>Branson</i>. The <i>Virgin</i> of the creative industry, Scotland’s <i>Imagination</i>” (Sigma Brand Plan, October, 2004).</p> <p>“...[To] create the Scottish ‘creative hothouse’ – known for real creativity that delivers, irrespective of discipline, [and to] deliver, harness, experience and exploit the best in creativity backed by solid commercial thinking” (SigmaGroup Brand Plan, January, 2006).</p> <p>“Create a portfolio of work that you just know can blow people away” (Brian).</p> <p>“[SigmaGroup] got to a scale, that the management of that quality, both of [the client] relationship, and of work and the management of the business was such that was so big that in my view, rightly or wrongly, the quality [of work] had disappeared...and it was a big machine...and the churn...and it spent more time navel gazing and looking inwards than it did looking outwards...both in terms of looking out for client, but also in terms of best practice, in terms of being at the forefront knowledge wise of what was happening” (Henry).</p>
Strategic intent paradox	Staff emphasis on profit (exploitation)	<p>“We did some flats, which were design and build so they are handed over to a contractor and the contractor was left to finish the detail so there’s nothing of quality about them and there was numerous little interior projects where would specify floor coverings, wall coverings...so a lot of these things were very elemental and off-the-shelf but packaged together as an interior project” (George).</p> <p>“I don’t think there was any real quality control over the type of work that was coming in...[we would] almost do anything. You could be working on like a decent luxury brand and then be doing retail advertising and then doing something else...” (Anthony).</p> <p>“The most disappointing thing for me, [is that] at the end of it, I didn’t even have anything [design work] [to] say ‘wow, look at that, let’s put that up in our website’” (Garry).</p>

Table 4: (Continued)

Aggregate Dimension	Second-Order Themes	Representative Quotes
Defence mechanisms	Regression	<p data-bbox="815 347 2031 395">“[Sigma has] always been a company that is serious enough and believes in itself enough but not too seriously, likes a laugh, likes a carry-on...” (Brian).</p> <p data-bbox="815 421 2031 517">“...you don’t even need to feel obliged to give us a brief, just tell us the problem because sometimes if you give us a brief you’re starting to be prescriptive’. Because actually what tends to happen is a brief usually says, ‘here’s the problems, here’s what we want, here’s the cost or the budget and here’s when we need it by’, and it pretty much gives you a very narrow ballpark to work in. Whereas actually creativity works best with us when they actually say, ‘We have a problem, gonna give us an answer?’” (Brian).</p> <p data-bbox="815 542 2031 590">“...if I can get away with it in the very first instance I won’t set any parameters. So you let them come back and sometimes you get a nugget out of it and sometimes you think, ‘...I shouldn’t have done that’...and then from that you can then start dibbling in” (Brian).</p> <p data-bbox="815 616 2031 692">“It’s strictly [SigmaGroup’s senior] management style...we are more likely to go all ‘all look everyone, it’s been really nice this week, let’s all have some beers...in the middle of the day’, than write up the notes from the meeting that the person just been to. And there’s something nice about that, but it’s also...self-harming too” (Garry).</p>
Defence mechanisms	Ambivalence & Splitting	<p data-bbox="815 762 2031 839">“There was no doubt about the talent...Unfortunately at the top we didn’t...have the right kind of people who could drive the business in the right way... [Staff] was just trying to do their bit to get by [which is] just not good enough. You’ve got to love what you do, [and] be passionate about it” (Anthony).</p> <p data-bbox="815 865 2031 890">“[Many opportunities were] missed that just [went] into the drawer of shame, [full of] ‘what could have been [projects]’” (Anthony).</p> <p data-bbox="815 916 2031 963">“[SigmaGroup’s] own naivety...meant that [it] produced...thousands of really quite average or bad work, because it was all needed too quick and too soon” (Garry).</p> <p data-bbox="815 989 2031 1037">“...the problem with that is you end up with a kind of a middle ground which is really horrible that like no one is particularly happy with. The client kind of accepts it because that’s all they’ve been given at the end of the day” (Anthony).</p> <p data-bbox="815 1062 2031 1139">“Two or three years [after the merger], [SigmaGroup] was almost too big for itself as the of result of a merger of necessity, on reflection it was quite top-heavy. So there started to get cliques...Some sides of the business were doing well, other...weren’t and it never...looked like it was going to continue so in that form and, sure enough, different people started talking about doing their own thing” (Michael).</p> <p data-bbox="815 1165 2031 1257">“[Henry, the head of] the graphic and brand side and [the guy who] headed-up the digital side...both asked me if I would go with them when they were planning their exit. I felt a bit pulled, ...almost...stretched across the two of them. I also still had at that stage...loyalty to the people who effectively they were leaving,...there was all sorts of politics behind the scenes...So I just tried to distance myself completely from it. There was so much kind of noise...I was struggling just to get on with the job and servicing clients” (Michael).</p> <p data-bbox="815 1283 2031 1331">“So you know there is a kind of inherent problem with that when you’ve got a company built up of different people trying to get one over on each other all the time. How does that filter down to everyone else? Well everyone else is just a bit chaotic...” (Michael).</p>

Table 4: (Continued)

Aggregate Dimension	Second-Order Themes	Representative Quotes
Impact	Relaxed management style	<p>[there is]...a lack of basic process [which] is a problem and we need to get that back... [SigmaGroup doesn't have processes] because that is part of their [senior management] style...' (Garry).</p> <p>"What we're actually trying to [do is] "manage not managing". That's the great problem about this industry,...you're trying to instil sometimes mathematical sciences into the creative process and [so] you immediately stifle the creative process.... [Garry] will tell you he still needs to know [the client's] objectives,...values, technical or tactical aspects, ...markets, [and whether] is it a sales-related objective. But the truth of the matter is that, we will try and not limit ourselves to what they tell us or don't tell us" (Brian).</p> <p>"...by not doing that [briefing] we don't limit ourselves to being prescriptive to what the client wants because actually what I've found in doing this job for so long is that a lot of the time the client has actually no idea what they want and they only tell you what they want because that's the way they've been trained to think" (Brian).</p> <p>"I think we're like Barcelona, I give them the ball and just let them run with it...For me it's not really about managing the process. I manage the process by not necessarily trying to manage it too much. I'll just put down the flags and say, 'there's your park to play in and there's the ball – go and play with it'" (Brian).</p> <p>"We actually don't have a process on that, and it is often ad-hoc...someone will come out from a meeting...they [are] not necessarily writing a contact report and saying, 'OK, here are the key challenges for this client, here's really what they need', it's often a case of standing by the kettle waiting for the coffee to be ready, going 'so what happened to that meeting yesterday?', 'oh did they say that, why don't we...?','oh yeah, that's a good idea, let's look at that...','OK'. I'd love us to have a process on that, and I don't think it's difficult to do, I think we're just not there yet, so it's too organic..." (Garry).</p> <p>"I would sometimes feel like either a brief wasn't particularly good to begin with or maybe feedback coming back from the client wasn't enough, [it] wasn't transcribed well enough that you felt like you knew where you could go with it" (Anthony).</p>
Impact	Resources scarcity	<p>"[SigmaGroup] front ended on the fees so there was loads of money coming in at the very start which was paying a legacy of debt for other projects and then you got to the end of the project where there was a lot of detailed design required or solutions required, [and] there was no money coming in to pay for the time. So you didn't have the luxury of time" (George).</p> <p>"There...wasn't enough designer-client contact...and the problem that comes with that is that there's a lot lost in translation...in between, the design team and the account management [team] and then the client themselves" (Anthony).</p> <p>"When there was the director saying 'you can't work on that anymore you've got half a day to provide a solution'..., if you've got half a day you take the logical option to answering your director's response...which is ultimately restricting your creativity" (George).</p>

Table 4: (Continued)

Aggregate Dimension	Second-Order Themes	Representative Quotes
Impact	Resources scarcity (continued)	<p data-bbox="817 343 2054 470">“...There’s nothing worse for the creative process for it to be stalled...if someone’s starting something, you must let them take it to where they gonna take it. If you then interrupt them and say ‘I know you’re working on this, but I need you to stop and work on something completely different, completely different client and I need this for lunch time’...We [at Sigma] have a very casual, lazy way of going about what we’re doing... a good process...should protect that space for them [designers] to do...[their] thinking” (Garry).</p> <p data-bbox="817 486 2054 598">“[We] probably managed to get away with it, but when you’re in it,...you’re...just getting on with it,...it’s easy to find yourself ticking off the fact that you managed to submit a presentation.... It should be [about] the quality of...what you’ve pitched or presented” (Michael). ‘I often felt that we almost exuded a bit of panic when we were going [to] pitches, it was almost like you could tell that we’d been up the night before because we were still running things through and...things weren’t quite polished or...we were 5 minutes late” (Michael).</p> <p data-bbox="817 614 2054 718">“I think designers [were getting] quite annoyed, as they [were feeling] that they’re just getting dumped with stuff, that they’re not being given a proper brief. I’ve done it myself, where if you come off the phone to a client and you’re not quite sure in exactly what they want but...they want it tomorrow...And the easier thing to do is just “oh [will you] just come up with something?”. I think the more...the account managers...are stretched, the less time they have to put in any thought...and things just get thrown at designers...” (Michael).</p>

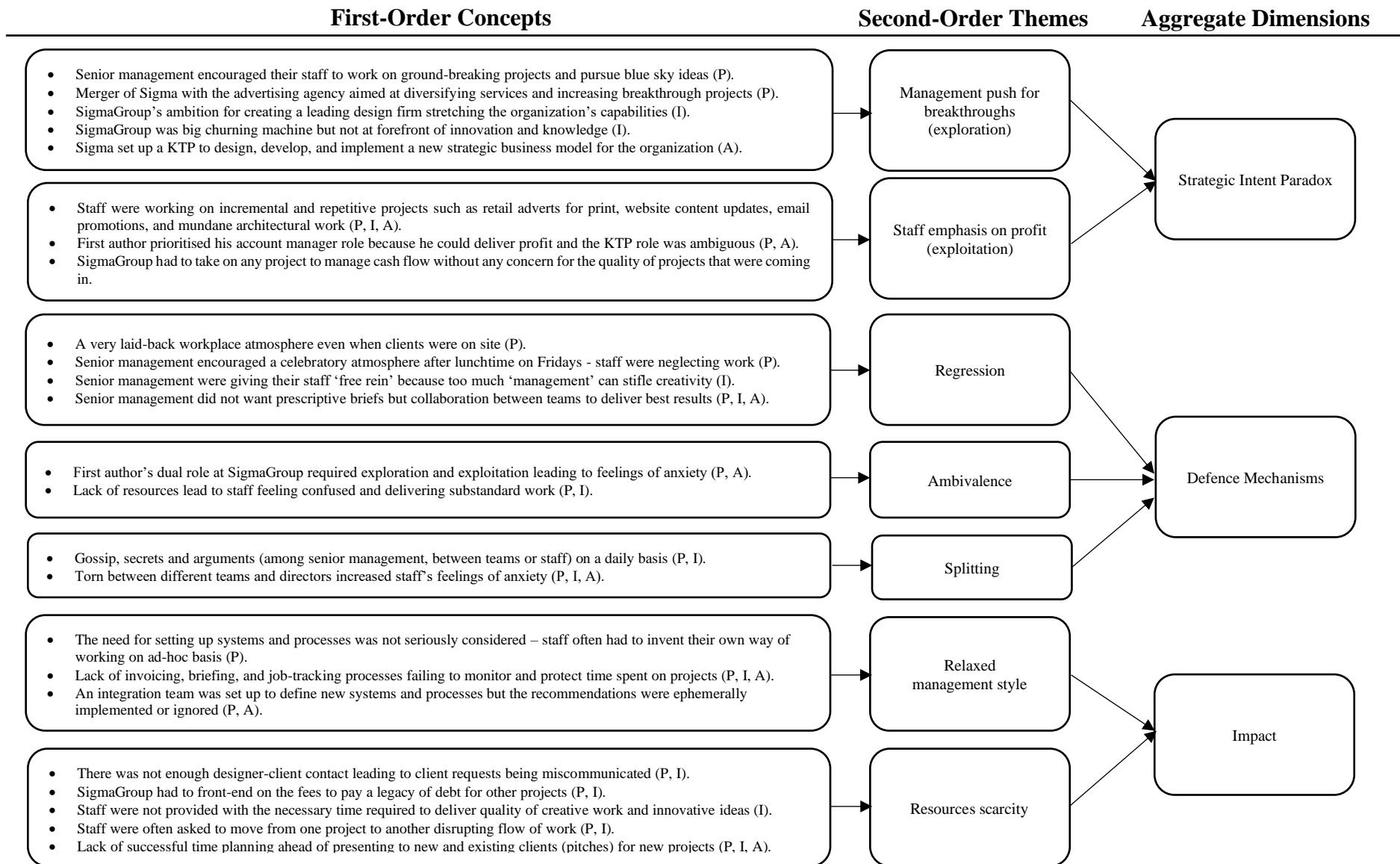


Figure 1. Data Structure

P= Participant Observation Notes
 I = Interviews
 A=Archival documents

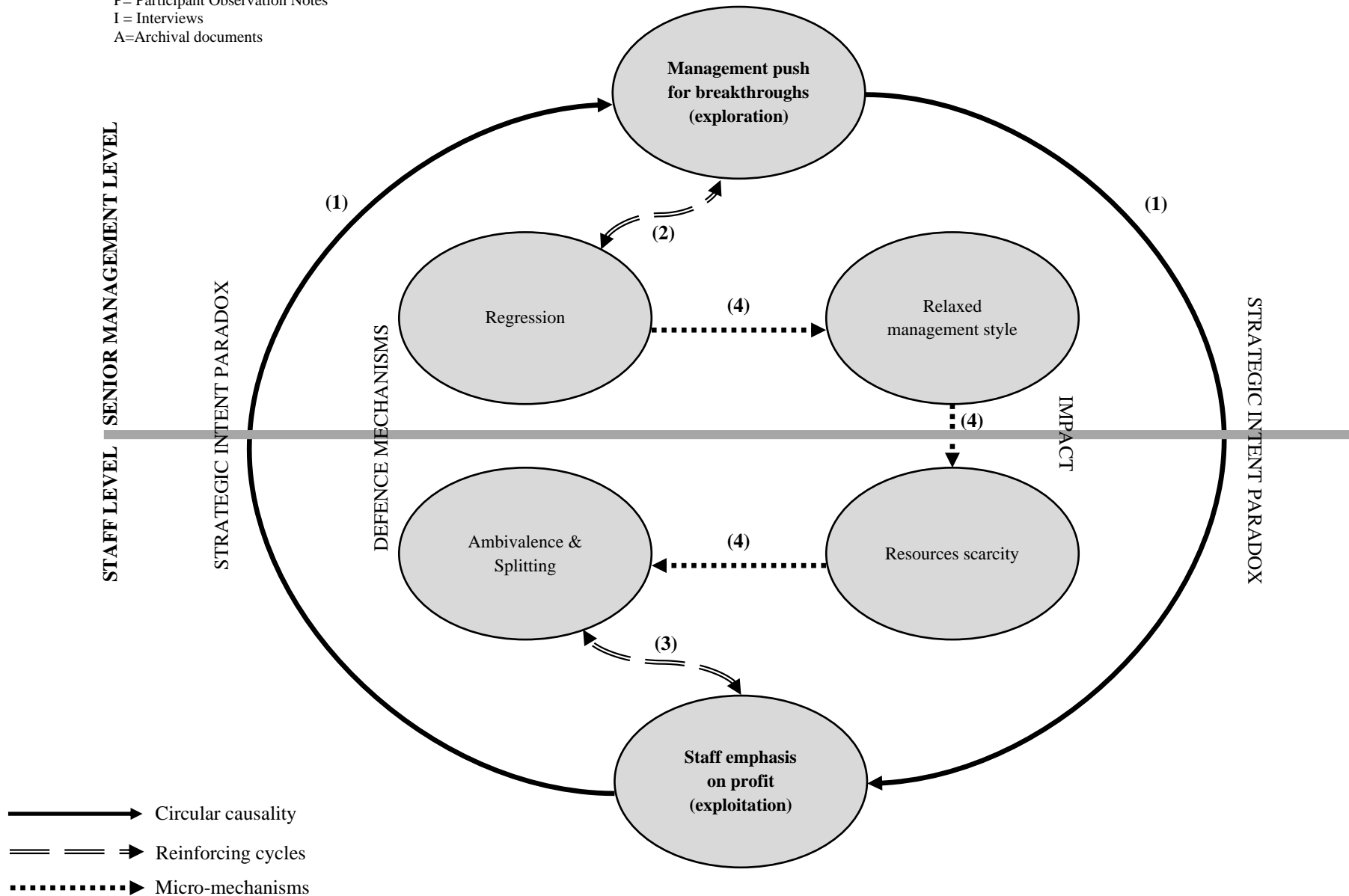


Figure 2. Vicious Cycle Dynamics Model